

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/665,264	EHRlich, RICHARD M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Natalia Figueroa	2651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to reply (filed 08/12/2005).
2. ☒ The allowed claim(s) is/are 1-48.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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## REASONS FOR ALLOWANCE

### *Allowable Subject Matter*

1. Claims 1-48 are allowed.
2. The following is an examiner's statement of reasons for allowance:

RE claims 1 and 13, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a filter to filter an amplitude error signal and produce a servo automatic gain control (AGC) signal therefrom; and a programmable limiter to keep the servo AGC signal within a desired range, before the servo AGC signal is used for feedback control; wherein the desired range includes at least one of an upper limit value and a lower limit value.

RE claims 12 and 16, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a filter to filter an amplitude error signal and produce a servo automatic gain control (AGC) signal therefrom; and a programmable limiter to keep the servo AGC signal within a desired range, before the servo AGC signal is used for feedback control; wherein the programmable limiter limits an output of the filter to thereby keep the servo AGC signal within a desired range, before the servo AGC signal is provided to a variable gain amplifier (VGA) of a read channel; and wherein the programmable limiter is external to the filter.

RE claim 17, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a path to condition the signal produced by the at least one head and to produce a conditioned signal therefrom, the path including a variable gain amplifier (VGA); a servo demodulator including a servo automatic gain controller to adjust an amplitude

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of the conditioned signal by providing servo automatic gain control (AGC) values to the VGA; and a programmable limiter to keep the servo AGC signal within a desired range, wherein the desired range includes at least one of an upper limit value and a lower limit value.

RE claims 19 and 31, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a filter to filter the error signal and produce a servo phase lock loop (PLL) signal therefrom; and a programmable limiter to keep the servo PLL signal within a desired range, before the servo PLL signal is used to adjust a frequency of an oscillator; wherein the desired range includes at least one of an upper limit value and a lower limit value.

RE claim 24, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a filter to filter the error signal and produce a servo phase lock loop (PLL) signal therefrom; and a programmable limiter to keep the servo PLL signal within a desired range, before the servo PLL signal is used to adjust a frequency of an oscillator; wherein the filter includes an integration path that includes a further programmable limiter that is used to prevent integral windup.

RE claims 30 and 34, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a filter to filter the error signal and produce a servo phase lock loop (PLL) signal therefrom; and a programmable limiter to keep the servo PLL signal within a desired range, before the servo PLL signal is used to adjust a frequency of an oscillator; wherein the programmable limiter limits an output of the filter to thereby keep the servo PLL signal within a desired range; and wherein the programmable limiter is external to the filter.

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RE claim 35, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a path to condition the signal produced by the at least one head and to produce a conditioned signal therefrom; a servo demodulator including a servo automatic gain controller to adjust an amplitude of the conditioned signal; a programmable limiter to keep the servo PLL values produced by the servo phase lock loop within a desired range, wherein the servo PLL values are used to adjust a frequency of the oscillator; and wherein the desired range includes at least one of an upper limit value and a lower limit value.

RE claim 37, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a path to condition the signal produced by the at least one head and to produce a conditioned signal therefrom; a servo demodulator including a servo automatic gain controller to adjust an amplitude of the conditioned signal; a register to store an automatic gain control (AGC) value for the servo automatic gain controller; and a microprocessor to replace the AGC value stored in the register with a value within a desired range, when the AGC value stored in the register is outside the desired range.

RE claim 43, the prior art of record, and in particular Bliss (USPN 5,585,975) fails to teach or suggest a system comprising a path to condition the signal produced by the at least one head and to produce a conditioned signal therefrom; a servo demodulator including a servo phase lock loop used to control timing within the path; and a register for storing a servo phase lock loop (PLL) value for the servo phase lock loop; and a microprocessor to replace the servo PLL value stored in the register with a value within a desired range, when the PLL value stored in the register is outside the desired range.

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3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554.

The examiner can normally be reached on Monday - Thursday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
NFM

  
DAVID HUDSPETH  
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